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Marine Contingency Dormitory on fast track at Aviano Air Base

Story and photos by
Torrie McAllister
Europe District Public Affairs

Temporary living quarters for Marines supporting Air Force contingency operations at Aviano Air Base in Italy will improve this summer.

Aviano Air Base, home of the 31st Fighter Wing, is a forward staging area for NATO operations. In recent years, Marine units have rotated through Aviano on temporary duty at six month intervals to



Europe District Project Engineer Ben Piteo is directing the fast-paced effort to renovate Ariete Barracks on Aviano Air Base. The historic structure was originally designed by Piacentini — a famous Italian architect from the Mussolini era. (Photo by Torrie McAllister)

support Bosnia, Kosovo and other contingency missions. About 600 Marines have been living in a tent city and in off-post contract lodging for \$100 a night.

The Corps of Engineers is managing an intensive fast-track renovation of a dilapidated 60-year-old Italian military barracks into a modern contingency dorm to house the Marines. The contingency dorm

will reduce TDY costs and improve force protection. It will also free up the tent city site so the Air Force can intensively develop the base, where space is at a premium.

The 60-year-old Ariete Barracks housed Italian soldiers until 1997 when the Italians closed their base and transferred the property to U.S. Forces to support the

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Repairs made to Lincoln Village balconies

Repairs are being made to 20 Army Family Housing balconies on Lincoln Village in Darmstadt, offering a better quality of life for residents. Metal railings, exterior lighting, and concrete floors are being upgraded and repaired. Other work includes the painting of exposed concrete surfaces and the installation of a nonslip surface on the balcony floors. Europe District's Non-appropriated Fund Program Manager Lisa Bobotas is managing the project. (Photo by Al Opstal)

Engineering in Europe

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Visit the Europe District Website at
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German partners receive Silver Castle Awards from Europe District

Europe District Commander Col. Mike Barry recently presented the Corps of Engineers Silver Castle Award to five German construction administration officials for their outstanding support of U.S. Forces through the ABG 75 design and construction process. The award was presented to:

Heike Tretter of the Staatsbauamt Friedberg Hessen — for exceptional achievement in managing the design and construction of three barracks renovation projects at Buedingen. Tretter worked diligently to expedite critical design activities and overcame numerous technical problems as well as constantly changing the design criteria to successfully complete the \$20 million quality of life initiative on time, and within budget.

Werner Milius of the Staatsbauamt Freidberg Hessen — for exceptional achievement in managing the design and construction of three barracks renovation projects at Buedingen. Milius worked diligently to expedite critical design activities and overcame numerous technical problems as well as constantly changing design criteria to successfully complete this \$20 million quality of life initiative on time, and within budget.

Reinhard Bill of the Staatsbauamt, Freidberg Hessen — for exceptional achievement in managing the design and construction of three barracks renovation projects at Buedingen. Bill worked diligently to expedite critical design activities and overcame numerous technical problems, as well as constantly changing the design criteria to successfully complete the \$20 million quality of life initiative on time and within budget.

Peter Gruempel of the Staatliches Hochbauamt Nuernberg II — for



exceptional achievement in executing the renovation of troop billeting to include Building 6515 at Illesheim's Storck Barracks, the restoration of Katterbach Family Housing, and the renovation of Katterbach Barracks Building 5813. Gruempel proactively identified construction difficulties and provided solutions that kept the work on, or ahead of schedule, and took advantage of cost saving opportunities. He continuously submitted changes for quality improvement and still managed to complete the projects within funding constraints.

Karl Stoppelbein of Oberfinanzdirektion Koblenz, Landesvermoegens und Bauabteilung Mainz — for exceptional achievement in the reduction of ABG 75 administrative fee accounts in the OFD Koblenz and other OFD areas. Stoppelbein was, and is, instrumental in coordinating timely and effective invoice submittals. His appointment by the Ministry of Construction as the Germany-wide coordinator for administrative fee procedures is a great success, largely through his personal involvement and endeavor. Through his outstanding support, previous delays in the fee administration process have been greatly reduced, allowing funds to now be used for fee payments prior to their expiration.

Europe District Commander Col. Mike Barry presented LBD Ulrich Bader an honorary Corps of Engineers hard hat and key plaque in honor of his recent retirement and his innovative leadership with the U.S. Army, Europe Barracks Program Standard Design Guide. (Photo by Torrie McAllister)

Europe District participates in National Engineer Week activities

Students tackle SAME team in MathCounts contest

Story and photos by Torrie McAllister
Europe District Public Affairs

The Wiesbaden American Middle School MathCounts team honed their skills playing Math Jeopardy against engineer leaders from the Wiesbaden Military Community. The competition was sponsored by the Rhein-Main Post of the Society of American Military Engineers (SAME) during National Engineer Week.

Europe District Project Manager Randy Holman helped coach the team of seventh and eighth graders with middle school math teacher Mary Downham. "I've always enjoyed teaching and tutoring. MathCounts is great because it's an extracurricular activity," Holman said. "The students all enjoy math and want to be there."

The students easily trounced the SAME team. Those who volunteered and lost gracefully included Army and Air Force Exchange Service Engineer Maj. Larry Brown, Department of Defense Dependent Schools Engineer Wayne Hartman, 221st Base Support Battalion Directorate of Public Works Engineer Tom Robertson, and Europe District Commander Mike Barry.

The Rhein-Main SAME Post works with youth to promote the engineering profession. In addition to



MathCounts contest judge Kristine Allaman, Director of the USACE Installation Support Center, watches the competition with members of the Rhein-Main SAME post.

helping coach the MathCounts team, the Post sponsors the European Science and Technology Fair by providing judges and prize money.

Last year they awarded three, \$1,200 scholarships to graduating high school seniors majoring in engineering or science.

More information on SAME can be found on their website at: <http://www.same.org>



The Rhein-Main SAME team included (from left) AAFES Engineer Maj. Larry Brown, DoDDS Engineer Wayne Hartman, 221st BSB DPW Engineer Tom Robertson, and Europe District Commander Col. Mike Barry.



The Wiesbaden American Middle School MathCounts team work on their answers for Math Jeopardy. The students are (from left to right) Shelby Levins, Ana Lohmer, Adam Welker, and Billy Frazier.

Engineers teach youth during Engineer Week

By Torrie McAllister
Europe District Public Affairs

Five engineers from the Rhein-Main Post of the Society of American Military Engineers (SAME) tried their talents as teachers during National Engineer Week.

They took over the blackboard in the five core classes—English, science, history, algebra and physical education—to tell the students about engineering and it's relationship to their studies.

"The math and science classes were our obvious target of opportunity for reaching future engineers but the school asked us to give Engineer Week presentations to all of the eighth grade classes during one period," said Europe District Deputy Commander Lt. Col. Al Bleakley. "Suddenly we had the chance to think about engineering in all kinds of new ways."

"We started each class with a ten minute video explaining the many fields of engineering in modern life — from space to medicine to construction to manufacturing. Then we each tried to connect engineering to the class we had been asked to teach," Bleakley said.

"For example, I'm an engineer who minored in English and technical writing," said Bleakley. "I talked to the English students about the importance of communication for engineers — of being able to clearly describe their ideas so that others can build them."

In the physical education class, Lt. Col. Mike Jasenak showed a video on bicycle design as a springboard to discussing the many disciplines that go into the design and manufacturing of everything around us."

Tim Connelly, an environmental engineer for Dames & Moore GmbH, gave the history class a brief history of engineering. "Then I showed them how we take water samples at contaminated sites. Two volunteers put on health and safety gear to serve as my chemical and hydraulic engineers while we took a mock sample with a water pump. That really got their attention."

Connelly finished by pulling out a hefty 300-page master plan for a sewer system so the students could see the types of reports customers buy from architectural and engineering firms.

"They really wanted to know how long it would take to write a thick report and how much it would cost," said Connelly. "I don't know what impressed them more — the fact that we did it in two months or the fact that it was \$25 million."

Tammy Williams, a project manager at Europe District, started her career as a math and science teacher before completing her masters degree in environmental engineering. She taught the math class and fielded questions like "What use will trigonometry ever be?" She was able to give students a new angle on trigonometry.

"It was my first time in the classroom in eight years so it was fun to see what has and hasn't changed," she said. "We talked about the kind of courses you need to study to become an engineer and the importance of algebra as the basis of all math and science studies."

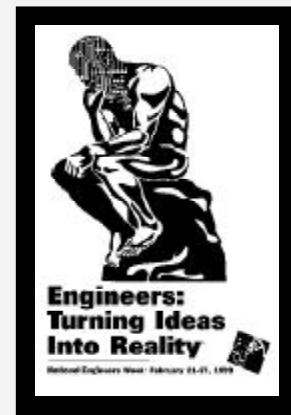
And about the relevance of trigonometry? "Well, it certainly teaches you to think logically and that's critical for all engineers," she said.

In the science class, another Dames & Moore GmbH volunteer Peter Storch fielded a number of serious questions about engineering as a career. "They were very interested in the different types of engineers — I could see them thinking about type of engineering they would like best. I brought in samples of things I do as an engineer, including design drawings."

Even as eighth graders, the science students were pragmatic. "They wanted to know about salaries for engineers, and what the need would be for engineers in the future," Storch said.

Math Teacher Mary Downham said Engineer Day was a great success, especially in classes where the students got a real life taste of the impact.

"Eighth graders are starting to think about careers so we wanted to reach as many kids as possible," she said. "By volunteering to teach all five of our core classes, the engineers taught our entire eighth grade."



Girl Scouts visit Europe District

Story and photo by Torrie McAllister
Europe District Public Affairs

Where is the next Isaac Newton? Maybe in Wiesbaden Girl Scout Junior Troop III. The fifth graders, who are working on their architecture badge, visited Europe District during National Engineer Week to see engineers in action.

Computer-Aided Design and Drafting Lab (CADD) Chief Roy Parks showed them how his team developed a 3-D animation fly-through of a proposed school complex for Italy. Architect Tom Starbuck showed them how designers cut and paste standard design elements. Project Engineer Al Hasty showed them how builders read plans and specifications to find out where the electrical outlets and utilities go. Project Manager Camille Mallory explained the importance of good communication between customers and designers, and making sure you work within a budget. The Scouts also received a brief history of the Corps of Engineers from Europe District Deputy Engineer Pat Bilter.

"Now they all want to be CADD graphics



CADD Lab Chief Roy Parks showed visiting Girl Scouts how his team developed a 3-D animation fly-through of a proposed school complex for Italy.

design engineers — except for one who wants to be an environmental engineer or a veterinarian," said Troop Leader Beth Joiner. "A lot of girls have no concept of engineering as a career path they could follow. This field trip gave them a whole different understanding of the relevance of math and science to everyday life."

Rhein-Main SAME post wins tops honors

The Society of American Military Engineers Rhein-Main Post won the bronze award for the 1998 "Top 3" distinguished posts. It is the first overseas post to win the "Top 3" honor, and the second medium-sized post to make it to the top three. In 1998, the group focused on nurturing a one-team relationship between Europe District, architectural and engineering firms, combat engineers, and facility engineers. The group also actively pursues mentoring youth who are interested in careers in engineering and science.

The 1998 SAME Board of Directors includes:

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The Society of Military Engineers website is at <http://www.same.org>



The 31st Fighter Wing is turning Ariete Barracks into a contingency dormitory for Marine units who are TDY to Aviano Air Base.

Dormitory

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increased operations tempo at Aviano. One of the major renovation challenges has been speed.

“The Air Force needed the design and construction completed within nine months,” said Europe District Project Engineer Ben Piteo, who is managing the construction. “Many people said the building was in such bad shape it could never be done. We developed a design-build contract that combined the talents of the Italian architectural and engineering firm OK Design, and the construction contractor Cooperativa Muratori Riuniti (CMR).

“To get the project launched quickly, OK Design developed a 35 percent concept design and a 100 percent seismic design,” Piteo said. “CMR then took over the 35 percent concept and finalized it during construction. We have all of the construction disciplines on site at the same time working in a tight sequence and so far everything is right on schedule and within budget.”

To track the activity, Piteo asked the construction contractor to use a system of color-coded hard hats to let Piteo quickly determine who is on a floor and what they are responsible for.

“It’s my system for safety and efficiency,” Piteo said. “The supervisors wear white, the hydraulic trades wear blue, the electrical wear red, and the craftsmen wear yellow. It’s like watching an orchestra play. I can see at a glance where the cellos are.”

The major challenge has been to seismically upgrade the four-story building while preserving the architecture. It is a historic structure designed by Piacentini, a famous architect of the Mussolini era, in the late 1930’s. He also designed the new University of Rome and the main artery streets

leading to Saint Peter Square.

Aviano is a Zone III earthquake area where Italy has strict new seismic codes. The old structure, which has 8,000 square feet — or just under two acres of floor space — was a hazard.

The designer’s elegant solution was to completely encapsulate the existing foundation with reinforced concrete. Shear walls were then built along, and perpendicular to the primary, in order to increase the lateral and longitudinal rigidity. Finally, the two towers at the ends of the building were separated from the main building. This allows the structures to sway and twist separately and safely in an earthquake.

Over 20 percent of the cost of the \$5 million renovation is for seismic upgrade,” said Europe District Project Manager Nuri Ergenekon, who managed the design.

The rest is to provide quality living for TDY Marines. Because Ariete is a contingency dorm, the Air Force is modernizing the original open bay living configuration rather than renovating to 1+1 standards.

The building has been torn apart down to the structural walls, and is being totally rebuilt with new finishes and fixtures. The utility and fire protection systems are being completely refurbished and interior finishes renewed. The ground floor will be offices and recreation areas including a fitness center, a game room, and a pub.

Upstairs, the sleeping rooms and gang latrines are being reconstructed with new floor tiles, suspended ceilings, fresh plaster and paint, and new utilities and fixtures. Each floor will have cable TV, computer rooms, phones and offices. The 31st Fighter Wing is currently developing a DD 1391 to renovate a near by dining facility to give the Marines a complete home away from home while deployed to Aviano.

“The Air Force needed the design and construction completed within nine months. We developed a design-build contract that combined the talents of the Italian architectural and engineering firm OK Design, and the construction contractor Cooperativa Muratori Riuniti.”

— Europe District Project Engineer Ben Piteo

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Official Business



New Youth Activities Center opens in Schweinfurt

Schweinfurt youth enjoy the many activities offered at the new Youth Activities Center located on Askren Manor. The 16,112 square-foot facility offers a computer lab, gymnasium, library, multipurpose rooms, and a full-service kitchen. Europe District individuals who worked on the project include Project Engineer Ella Cassity, Resident Engineer Armando Solis, Project Manager Randy Holman, and Non-appropriated Fund Program Manager Lisa Bobotas. *(Photo by Ella Cassity)*